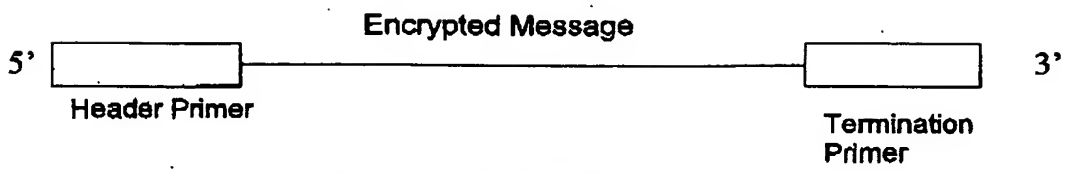

Fig. 1a. Single Segment

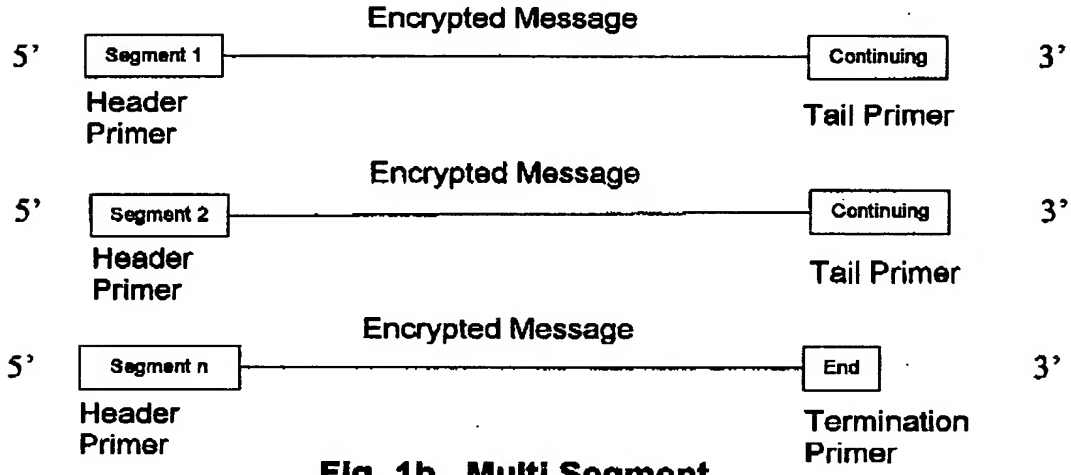

Fig. 1b. Multi Segment

Fig. 2. Encryption of extended ASCII character set in terms of DNA bases

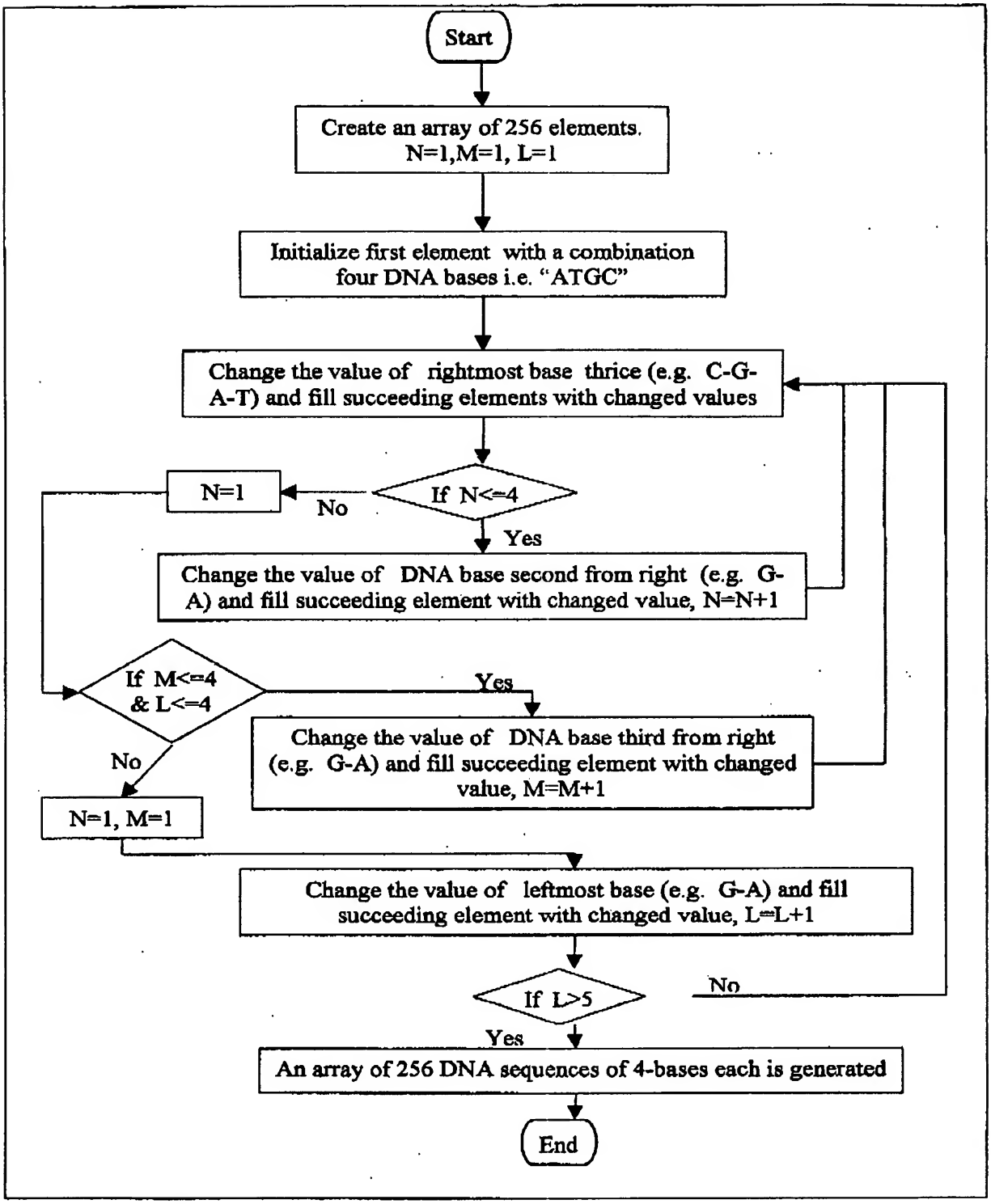

Fig 3. Encryption Key. ASCII characters in terms of DNA strands

Dec	ASCII	DNA CODE	Dec	ASCII	DNA CODE	Dec	ASCII	DNA CODE	Dec	ASCII	DNA CODE	Dec	ASCII	DNA CODE	Dec	ASCII	DNA CODE
0		ATCG	44	,	AGCA	88	X	TTAA	132	„	CGTA	176	°	CCCA	220	Ü	GGGT
1	□	ATGG	45	-	AGAA	89	Y	TTTA	133	…	CGCA	177	±	CCGA	221	Ý	GGAT
2	□	ATAG	46	.	AGTA	90	Z	TTCA	134	†	CGGA	178	²	CCAA	222	Þ	GGTT
3	□	ATTG	47	/	AGCA	91	[	TTGA	135	‡	CGAA	179	³	CCTA	223	ß	GGCT
4	□	ATTA	48	0	AACA	92	\	TTGT	136	ˆ	CGAT	180	´	CCTT	224	à	GACT
5	□	ATCA	49	1	AAGA	93	]	TTAT	137	‰	CGTT	181	µ	CCCT	225	á	GAGT
6	□	ATGA	50	2	AAAA	94	^	TTTT	138	Š	CGCT	182	¶	CCGT	226	â	GAAT
7		ATAA	51	3	AATA	95	_	TTCT	139	‹	CGGT	183	·	CCAT	227	ã	GATT
8	□	ATAT	52	4	AATT	96	`	TCCT	140	Œ	CGGC	184	¸	CCAC	228	ä	GATC
9		ATTT	53	5	AACT	97	a	TCGT	141	□	CGAC	185	¹	CCTC	229	å	GACC
10		ATCT	54	6	AAGT	98	b	TCAT	142	□	CGTC	186	º	CCCC	230	æ	GAGC
11		ATGT	55	7	AAAT	99	c	TCTT	143	□	CGCC	187	»	CCGC	231	ç	GAAC
12		ATGC	56	8	AAAC	100	d	TCTC	144	□	CACC	188	¼	CCGG	232	è	GAAG
13		ATAC	57	9	AATC	101	e	TCCC	145	‘	CAGC	189	½	CCAG	233	é	GATG
14		ATTC	58	:	AACC	102	f	TCGC	146	’	CAAC	190	¾	CCTG	234	ê	GACG
15	□	ATCC	59	;	AAGC	103	g	TCAC	147	“	CATC	191	¿	CCCG	235	ë	GAGG
16	□	ACCC	60	<	AAGG	104	h	TCAG	148	”	CATG	192	À	GCCG	236	ì	GAGA
17	□	ACGC	61	=	AAAG	105	i	TCTG	149	•	CACG	193	Á	GCGG	237	í	GAAA
18	□	ACAC	62	>	AATG	106	j	TCCG	150	–	CAGG	194	Â	GCAG	238	î	GATA
19	□	ACTC	63	?	AACG	107	k	TCGG	151	—	CAAG	195	Ã	GCTG	239	ï	GACA
20	□	ACTG	64	@	TACG	108	l	TCGA	152	˜	CAAA	196	Ä	GCTA	240	ð	GTCA
21	□	ACCG	65	A	TAGG	109	m	TCAA	153	™	CATA	197	Å	GCCA	241	ñ	GTGA
22	□	ACGG	66	B	TAAG	110	n	TCTA	154	š	CACA	198	Æ	GCGA	242	ò	GTAA
23	□	ACAG	67	C	TATG	111	o	TCCA	155	›	CAGA	199	Ç	GCAA	243	ó	GTTA
24	□	ACAA	68	D	TATA	112	p	TGCA	156	œ	CAGT	200	È	GCAT	244	ô	GTTT
25	□	ACTA	69	E	TACA	113	q	TGGA	157	□	CAAT	201	É	GCTT	245	õ	GTCT
26	□	ACCA	70	F	TAGA	114	r	TGAA	158	□	CATT	202	Ê	GCCT	246	ö	GTGT
27	□	ACGA	71	G	TAAA	115	s	TGTA	159	Ÿ	CACT	203	Ë	GCGT	247	÷	GTAT
28	□	ACGT	72	H	TAAT	116	t	TGTT	160		CTCT	204	Ì	GCGC	248	ø	GTAC
29	□	ACAT	73	I	TATT	117	u	TGCT	161	¡	CTGT	205	Í	GCAC	249	ù	GTTC
30	-	ACTT	74	J	TACT	118	v	TGGT	162	¢	CTAT	206	Î	GCTC	250	ú	GTCC
31		ACCT	75	K	TAGT	119	w	TGAT	163	£	CTTT	207	Ï	GCCC	251	û	GTGC
32		AGCT	76	L	TAGC	120	x	TGAC	164	¤	CTTC	208	Ð	GGCC	252	ü	GTGG
33	!	AGGT	77	M	TAAC	121	y	TGTC	165	¥	CTCC	209	Ñ	GGGC	253	ý	GTAG
34	"	AGAT	78	N	TATC	122	z	TGCC	166	¦	CTGC	210	Ò	GGAC	254	þ	GTTG
35	#	AGTT	79	O	TACC	123	{	TGGC	167	§	CTAC	211	Ó	GGTC	255	ÿ	GTCG
36	$	AGTC	80	P	TTCC	124	|	TGGG	168	¨	CTAG	212	Ô	GGTG			
37	%	AGCC	81	Q	TTGC	125	}	TGAG	169	©	CTTG	213	Õ	GGCG			
38	&	AGGC	82	R	TTAC	126	~	TGTG	170	ª	CTCG	214	Ö	GGGG			
39	'	AGAC	83	S	TTTC	127	□	TGCG	171	«	CTGG	215	×	GGAG			
40	(	AGAG	84	T	TTTG	128	□	CGCG	172	¬	CTGA	216	Ø	GGAA			
41	)	AGTG	85	U	TTCG	129	□	CGGG	173	-	CTAA	217	Ù	GGTA			
42	*	AGCG	86	V	TTGG	130	‚	CGAG	174	®	CTTA	218	Ú	GGCA			
43	+	AGGG	87	W	TTAG	131	ƒ	CGTG	175	□	CTCA	219	Û	GGGA			

Fig.4. Process sheet for encryption & storage

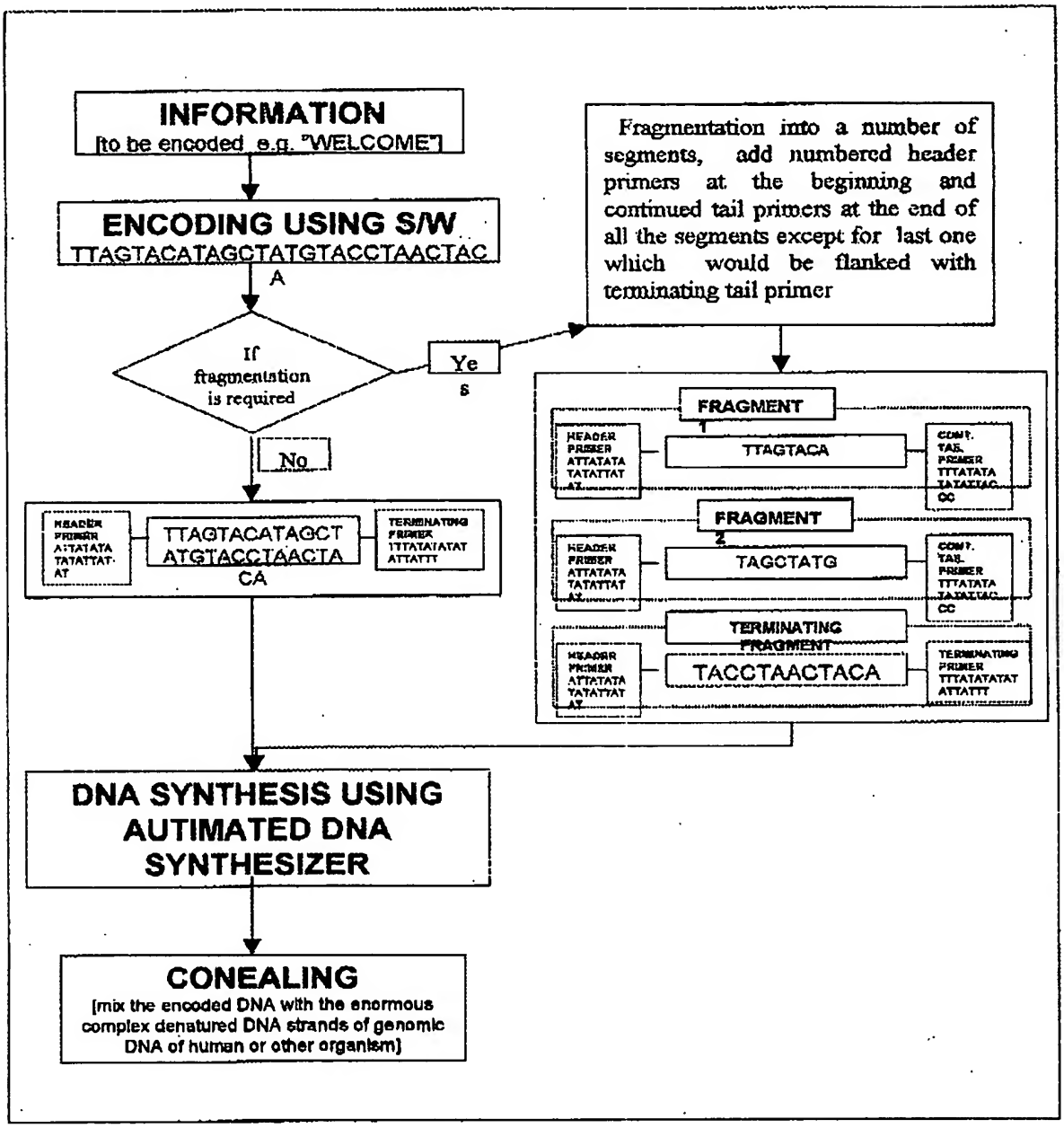

Fig.5. Process summary